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ENVIRO-TEST WEST
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CLEAN AIR/CLEAN WATER
(509)927-1436 OFFICE
(509)928-8350 FAX

Mr. Dean Fowler:
Colbert Landfill Project Manager
Spokane County Public Works
N. 811 Jefferson Street
Spokane, wa. 99206-0180

RE: Water sampling procedures for the Colbert Landfill Area.
Protocol enclosed

Mr. Fowler:

In (b) (6) recent letter to your office he made reference to, but did not name or in any way substantiate in writing, the problems he says are prevalent in the sampling program being supervised by ENVIRO-TEST WEST of Spokane, Wa.

Dean, we feel that specific complaints from home owners should be put in writing by the home owner and sent to the project co-ordinator, who should then bring these items to my attention at his earliest opportunity. I will then follow up on the problem immediately and see that it is resolved. I will then notify the project co-ordinator in writing of the method used to solve the problem.

We will grant that the sampling person may not be the most articulate, presentable, outgoing person in the Spokane area. However we don't believe that highly interpersonel public relations was one of the preconditions for this job. We believe that our company is paid to draw samples in a timely manner, following the protocols established by previous samplers and updated to meet current specifications. As my employees are paid by the hour we would prefer that they sample and leave as opposed to wasting time and money chatting with well owners.

As far as expertise in sampling is concerned, we would be happy to establish a program with Eastern, or WSU or any other college that has a water management or water quality training program. We would also hire their students or graduates if we could find someone who only needed to work one week per month, and if we can effect a change in the current price per sample to offset the added cost of using such people.

We would like to point out that the County now charges $9.00 dollars for a Bacteria sample and another $60.00 dollars to collect it. Also collecting a Bacteria sample does not require locating, purging, pumping wells that have been shut down, opening, closing, taking static water levels, measuring land surface distance where possible, taking conductivity readings, maintaining chain of custody, controlled temperature range, multiple check samples, travel samples and delivery to laboratory within specific time frames.

Dean, If we are going to be held accountable for charges that are so far based on enuendo and rumor, and made by a few people that feel there may be a problem, but do not have the necessary knowledge to make value judgements on sampling protocols, gallons purged, etc. Then a system should be set in place that will continue to assure that strict guidelines will be followed in sampling and also in handling the complaints registered by home owners in a logical manner, with a paper trail to create accountability for the people who have problems, or for those who create unnecessary time consuming problems.

Quite frankly, after my conversation with (b) (6) by phone last month, (she called me, notes of conversation enclosed). I find it strange that (b) (6) has been the one to write such a letter without at least attempting to call or write Mr. Austin or myself to express his concerns. As to the comment made in the letter from (b) (6) about "witch hunting" and "not being after anyone's job", I feel that the mention of it does confirm intent, otherwise why bring it up.

We also feel that the community has a very sensitive situation in the Colbert area and that although we feel concern for the Colbert residents we can not be seen to have any bias toward them or the County. To this end I have always instructed the samplers to not venture any opinions nor to answer any questions about protocols, policy, or make any statements that would involve either the company or the Spokane County, in any questionable words or actions.

We are not involved in setting standards, nor do we wish to be involved. We are not affiliated with any State, Federal, or County enities, and as such are not subject to conflict of interest and because of the legal problems (law suits on file) we wish to maintain this posture.

Oh Really!

We also feel that the home owners (all of them) should be polled by the project co-ordinator as to their feelings about the sampling crew and company etc. They should be allowed to voice their concerns as well as their approval and ENVIRO-TEST WEST will be responsive to their wishes as long as it does not make our job more costly, without just compensation for increased cost factors.

We believe there is a lot of smoke being blown by a few people, however we also feel that these people should use the system established for them to address these issues. Mainly by contacting the project co-ordinator in writing and allow him to due his job without interference.

Dean, I would like to offer a solution to some of the sampling problems discribed by (b) (6) As the Colbert Landfill Site has been declared to be a Superfund site and as this program has been projected to last 10 to 20 years I feel we should establish a more uniform sampling site for all the wells that need to be sampled. ie.

(1). Clearly mark each well location.
(2). Clearly mark each sample location.
  (a). Establish a permanent frost free sampling bib (locked) between well and any pressure tanks or other outlets.
  (b). Establish wells ability to support (3) volume pumping.
    (1). Volume pumping requires a knowledge of.
      (a). Well depth.
      (b). Pump depth.
      (c). Casing size and capacity.
      (d). Static water level.
      (e). Gallons per minute flow rate at sampling site.
        (or)
    (2). Specify use of conductivity meter to establish sampling time.
      (a). Conductivity testing requires that the well be tested, then pumped for 10 minutes or for approximately 200 gallons and then to be retested until (3) consecutive conductivity readings are found and recorded before samples are taken.
(3). Static water levels need to be established for all wells and wells need to be plumbed to allow probe to be safely inserted and retreived. (Plastic pipe installed in casing to pump depth).
(4). No system should be allowed to shut down for winter without provision for sampling team to have access. ie.(Frost free bib installed).

Dean, Hopefully when this is resolved everyone will have a better understanding of the special problems and offer some inovatative solutions to the Colbert Landfill situation.

Respectfully:

ENVIRO-TEST WEST

MELVIN E. WILSON
PRESIDENT

ENVIRO-TEST WEST

PROTOCOL FOR COLBERT LANDFILL PROJECT SAMPLING

STEP 1. CHECK DATA: (WITH OWNER OR RENTER IF POSSIBLE)
- CONFIRM OWNER
- ADDRESS
- PHONE
- IF RENTAL: CONFIRM NAME OF RENTER

STEP 2. CHECK SPECIAL INFORMATION SECTION:
- INSTRUCTIONS
- TOOLS REQUIRED
- PUMP REQUIRED

STEP 3. OPEN SYSTEM: (DO NOT START PUMPING)
- ESTABLISH WELL HEAD MEASUREMENTS
  - (a). LAND SURFACE DISTANCE. (SEE FIGURE 1)
  - (b). STATIC WATER LEVEL.
    - (1). CLEAN 10FT OF PROBE WITH DISTILLED H20
    - (2). CHECK DATA SHEET FOR APPROXIMATE H20 DEPTH. INSERT PROBE AND UNREEL TO H20 RECORD TIME AND SWL READING.

STEP 4. START PUMPING:
- RECORD TIME AND APPROXIMATE GALLONS PER MINUTE FLOW AT SAMPLE SITE.

STEP 5. CONDUCTIVITY READING:
- TAKE 1 GALLON PAIL AND RUN H20 CONTINUOUSLY INTO PAIL TAKE ONE (1) CONDUCTIVITY READING AND RECORD TIME AND READING.

STEP 6. ESTABLISH SYSTEM CONFIGURATION:
- (EXAMPLE) WELL)=SAMPLE BIB)=PRESSURE TANK)=HOUSE

STEP 7. CONDUCTIVITY READINGS:
- AFTER 10 MINUTES OR APPROXIMATELY 200 GALLONS OF H20 HAS BEEN PURGED OR THREE (3) WELL VOLUMES HAVE BEEN PURGED, (WHICHEVER OF THESE ITEMS ARE APPROPRIATE FOR THE SYSTEM YOU ARE SAMPLING). START CONSECUTIVE CONDUCTIVITY READINGS UNTIL YOU HAVE THREE (3) READINGS WHICH ARE THE SAME. RECORD ALL CONDUCTIVITY READINGS AND TIMES.

STEP 8. STATIC WATER LEVEL READING:
- RETAKE SWL READING TO ESTABLISH PUMP DRAW DOWN, RECORD READING AND TIME.

STEP 9. WATER SAMPLE:

ESTABLISH LOCATION SAMPLE BEING PULLED. (ie) FROST FREE YARD HYDRANT SOUTH SIDE OF WELL VAULT.

INSTALL STERILE SAMPLING TUBE.

(a). PULL TWO (2) AIRFREE SAMPLES.

(b). LABLE AS FOLLOWS: (EXAMPLE)

(1).	NAME:	DOE, JOHN
(2).	SAMPLING NUMBER:	1573C-14
(3).	TIME/DATE	10:15/7/1/88
(4).	SAMPLERS NUMBER	1

(c). PUT SAMPLES IN COLLECTION CONTAINER WITH TRAVEL BLANKS.

STEP 10. CLOSE SYSTEM:

BE SURE TO RETURN SYSTEM TO EXACT CONDITION YOU FOUND IT IN.

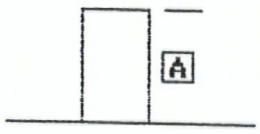
(a). RECORD ANY SYSTEM PROBLEMS. (ie) LEAKS, STANDING WATER, INFESTATIONS, ETC.

NOTIFY OWNER OF PROBLEMS IF POSSIBLE

PLACE DOOR HANGER AS DIRECTED BY B. AUSTIN 2/5/90

FIGURE 1

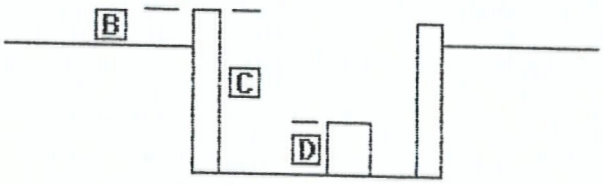
PITLESS SYSTEM



MEASURE GROUND TO TOP OF CASING

FIGURE A

WELL VAULT



MEASURE GROUND TO TOP OF VAULT

FIGURE B

MEASURE GROUND TO TOP OF VAULT

FIGURE C

MEASURE GROUND TO TOP OF CASING

FIGURE D

1989 - 1990 SAMPLING PLAN
APPROVED BY SAMPLING SUBCOMMITTEE 11/2/89

WELL #	NAME	ZONE	WWD	CONTAM	TEST/YEAR	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1073B-2	BN (N)	1	N	Y	2					X			X				
0273C-7	(b) (6)	1	N	N	1			X									
0273P-3		1	N	Y	3				X			X					X
3C-3		1	N	N	2						X						X
0273Q-1		1	N	N	1							X					
0373P-1S	(b) (6) SPRINGS	1	Y	Y	1								X				
0373A-3	(b) (6)	1	Y	N	1									X			
0273N-8		1	Y	Y	1								X				
0273F-4		1	N	N	2	NO ACCESS											
0273P-1		1	Y	Y	1		X							X			
0273C-4		1	N	N	2									X			
0273N-7		1	Y	Y	1				X							X	
0373L-1S	STERLING SPRINGS	1	N	Y	4			X		X			X				X
0273C-1	(b) (6) NORTH	1	N	N	2		X							X			

WELL #	NAME	ZONE	WWD	CONTAM	TEST/YEAR	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0373A-1	(b) (6)	2	N	N	3		X			X				X			
0273L-1		2	Y	Y	1	NO ACCESS											
0373J-1		2	Y	Y	0											X	
0273P-5		2	Y	Y	1						X						
0273D-1		2	N	N	3			X			X					X	
0273F-2		2	N	N	2					X							X
0273P-4	(b) (6) (N)	2	N	N	1									X			
0273F-3	(b) (6)	2	Y	N	1												X
0273E-1		2	N	Y	6		X	X		X			X	X			X
1173B-1		2	N	N	2			X						X			
0273C-2		2	Y	N	1												
0273L-2		2	Y	Y	1												
3M-1		2	Y	Y	1												X
0373J-3		2	Y	Y	1												
0273M-7		2	Y	N	1											X	
0273F-1		2	Y	N	1	SPRING '90											
0273N-5		2	Y	Y	1												
0273N-6		2	Y	N	0												
0273C-5		2	N	N	2												
0273E-2		2	N	Y	6												
0273C-6		2	Y	N	1												
0273D-2		2	N	N	2												
0373A-2		2	N	N	3												
0273D-5		2	Y	N	1												
0273E-3		2	Y	Y	1												
0273L-3		2	Y	N	1												
0273M-2		2	Y	Y	1												
0373A-4		2	N	N	3												
0273D-6		2	N	N	3												
0373J-5		2	Y	Y	1												
0373J-4		2	Y	Y	0												
0273D-3		2	N	N	3												

JAN 2 6 1990

1989 - 1990 SAMPLING PLAN
APPROVED BY SAMPLING SUBCOMMITTEE 11/2/89

WELL #	NAME	ZONE	WWD	CONTAM	TEST/YEAR		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1573F-1	(b) (6)	4	N	N	2					X						X		
1173L-1		4	Y	Y	1								X					
1173D-1		4	Y	Y	1											X		
3E-1		4	Y	N	1								X					
073J-1		4	N	N	3	2-3		X			X					X		
1573C-10	(b) (6) (NEW-NORTH)	4	N	N	2					X					X			
1573C- 9	(OLD-SOUTH)	4	N	N	0													
1073G-1	(b) (6)	4	N	N	2					X					X			
1473C-4		4	N	N	2			X					X					
1573C-17		4	N	N	2						X						X	
1573C- 5		4	N	N	2			X					X					
1573H-2		4	N	N	2					X					X			
1573H-3		4	N	N	2		X						X					
1573C-13		4	N	N	2		X				X							
1473C-1		4	N	N	2		X								X			
1073P-3		4	N	N	1											X		
1573A-2	N. MEADOWS (b) (6)	4	N	N	0													
1073Q-4	NORTH MEADOWS (MIDDLE)	4	N	N	3			X					X				X	
1073Q-5	NORTH MEADOWS (WEST)	4	N	N	0													
1573C-11	(b) (6)	4	N	N	2						X						U	
1473C-5		4	N	N	2					X						X		
1573C- 4		4	N	N	2			X					X					
1473D-1		4	N	N	2			X							X			
1573C-15		4	N	N	2			X							X			
1473C-2		4	N	N	2						X							X
1573H-1		4	N	N	2			X					X					
1173F-1		4	Y	Y	0													
1173F-2		4	Y	Y	1										X			
1473C-3		4	N	N	2						X						X	
73C-16		4	N	N	2			X					U					
1073J-2	WAHOO WATER DIST.	4	N	Y	3			X					X				X	
1073L-4	(b) (6)	4	N	N	2						X						X	
1573C-14		4	N	N	2						U							X

WELL #	NAME	ZONE	WWD	CONTAM	TEST/YEAR		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1573R-1	(b) (6)	5	N	N	4		X			X			X			X		
1573R-2		5	N	N	3			X				X					X	
2273A-2		5	Y	N	0													
2273F-1		5	N	N	1						X							
1473M-1		5	N	Y	12	8-12	X	X	X	X	X	X	X	X	X	X	X	X
2273J-1		5	N	N	1										X			
2373E-1		5	N	N	1	REVIEW '90										X		
1573H-4		5	N	N	1									X				
1473N-1		5	N	N	6		X		X		X		X		X		X	
1573R-3		5	N	N	2			X							X			
2373M-1		5	N	N	1	REVIEW '90						X						
2373D-1		5	Y	N	1													X
1573Q-1		5	N	N	4			X			X			X			X	
1573K-1		5	N	N	4				X			X			X			X
2273M-1	SUBURBAN HILLTOP	5	N	N	1								X					